Macdonald Campus, 21,111 Lakeshore Road, Ste. Anne de Bellevue, PQ, H9X 3V9 Canada

Loggerhead shrikes are classified as predatory songbirds. Yet song patterns of this species are poorly understood. From April until August 1994 we studied the vocalization behavior of captive-bred shrikes at McGill University and found sex-related song characteristics. During the breeding season several types of auditory displays and/or visual displays related to breeding behavior were also analyzed, including nest-site selection, food offering, food begging, courtship (pre-, during-, and post-copulation), feeding, and aggressive calls.

FIRST CAPTURE OF A LIVE MADAGASCAR SERPENT-EAGLE (EUTRIORCHIS ASTUR) AND PHOTOGRAPHS OF A LIVE MADAGASCAR RED OWL (TYTO SOUMAGNEI)
CONFIRM THE SURVIVAL OF THESE SPECIES

THORSTROM, R. AND R.T. WATSON. The Peregrine Fund, 5666 West Flying Hawk Lane, Boise, ID 83709 U.S.A.

Until recently, the Madagascar serpent-eagle, considered among the rarest raptors in the world, was known only from 11 museum specimens, the last of which was collected in 1930. A reported sighting in 1989 and a dead bird found in 1990 were the only evidence that the species remained extant. Repeated sightings and the capture of *Eutriorchis* 

astur by Peregrine Fund biologists in 1993 and 1994 have provided the first opportunity to study the biology and behavior of this species in the wild. A single sighting and photograph of a Madagascar red owl taken in February 1994 provides only the third account of this species since 1934, when the last museum specimen was collected. Previous sightings were made in 1974 and a bird was found in captivity in 1993 but died soon after discovery. Sightings described in this paper occurred on Masoala Peninsula, northeastern Madagascar.

## SURVEY OF SAVANNA GRASSLAND HABITAT FOR APLOMADO FALCONS AND OTHER RAPTORS

WARD, L.W., M.C. SIEMENS, R.L. GLINSKI AND M.I. INGRALDI. Arizona Game and Fish Department, Nongame Branch, 2221 West Greenway Road, Phoenix, AZ 85027 U.S.A.

Wild aplomado falcons (Falco femoralis) have been observed in New Mexico and Texas in recent years. In 1994, the Arizona Game and Fish Department initiated surveys for this species and other raptors in southeastern Arizona grassland habitat. Ten survey routes were established. We will present the protocol and preliminary survey results including data on raptor occurrence, distribution and density.